

## Supplementary Tables

**Supplementary Table 1.** Brain regions identified by voxel-wise analysis that show significant activation during differential quantitative processing in the *landmark*, *animal*, and *number* conditions.

Anatomical areas	Cluster size	<i>t</i>	<i>p</i>	MNI coordinates		
				<i>x</i>	<i>y</i>	<i>z</i>
a) <i>Landmark</i> Condition						
<b>Landmark Activation: positive</b>						
Precuneus_R	379790	17.30	0.00000	14	-54	14
Frontal_Inf_Orb_R	788	10.22	0.00000	32	26	-8
Frontal_Mid_R	413	6.94	0.00000	40	34	22
Cerebellum_Crus2_L	155	6.82	0.00000	-34	-70	-48
Rolandic_Oper_L	117	5.68	0.00000	-42	-24	18
Rolandic_Oper_L	63	4.54	0.00007	-46	-2	6
Frontal_Sup_Orb_L	171	4.16	0.00019	-22	54	-4
Frontal_Sup_Orb_R	36	3.93	0.00034	26	54	-2
Cingulum_Ant_R	14	3.76	0.00052	6	6	26
Frontal_Inf_Orb_R	20	3.42	0.00118	54	18	34
<b>Landmark Activation: negative</b>						
Cingulum_Ant_R	247350	12.72	0.00000	4	36	-6
Amygdala_L	5859	8.43	0.00000	-20	-4	-20
Cerebellum_Crus2_R	305	8.39	0.00000	26	-86	38
Cerebellum_Crus2_L	378	8.07	0.00000	-28	-84	-38
Occipital_Sup_R	580	8.03	0.00000	16	-88	30
Cingulum_Mid_R	358	7.19	0.00000	18	-48	34
Occipital_Mid_L	363	6.11	0.00000	-20	-98	16
Frontal_Inf_Orb_R	231	8.39	0.00000	26	-86	38
Fusiform_R	205	5.94	0.00002	50	36	-4
Frontal_Mid_Orb_L	164	5.11	0.00004	30	-48	-2
Insula_R	52	4.75	0.00028	-24	36	-16
Cingulum_Mid_L	45	4.00	0.00059	36	6	6
Insula_L	26	3.70	0.00107	-20	-48	30
Insula_L	14	3.46	0.00187	-24	26	20
Postcentral_R	14	3.23	0.00199	-30	2	16
Cerebellum_8_L	17	3.20	0.00213	56	-6	30
Cingulum_Ant_R	19	3.17	0.00000	-10	-66	-44
b) <i>Animal</i> Condition						
<b>Animal Activation: positive</b>						

Postcentral_L	124520	11.53	0.00000	-44	-26	46
Cerebelum_4_5_R	3134	8.19	0.00000	16	-48	-18
Occipital_Mid_L	488	6.29	0.00000	-40	-80	-2
Insula_R	359	5.41	0.00001	42	14	0
Occipital_Inf_R	181	5.17	0.00002	46	-80	-2
Lingual_R	61	4.34	0.00012	18	-72	-2
Cerebelum_6_L	98	4.20	0.00017	-32	-54	-32
Frontal_Sup_R	150	3.99	0.00029	22	2	48
Parietal_Sup_R	96	3.78	0.00048	26	-58	52
Pallidum_R	17	3.70	0.00059	18	-4	10
Occipital_Mid_L	14	3.62	0.00071	-28	-82	22
Precentral_R	17	3.58	0.00080	54	6	34
SupraMarginal_R	36	3.57	0.00081	46	-26	36
Precuneus_R	11	3.38	0.00128	34	-44	12

**Animal Activation: negative**

Frontal_Med_Orb_R	8175	11.08	0.00000	4	52	-6
Insula_L	4328	10.93	0.00000	-40	10	-14
ParaHippocampal_R	1125	8.56	0.00000	30	-34	-14
Cingulum_Mid_R	6711	8.43	0.00000	6	-18	44
Occipital_Mid_L	790	8.13	0.00000	-16	-100	0
Temporal_Sup_R	6826	7.65	0.00000	52	-14	-10
Pallidum_L	65	6.07	0.00000	-6	-4	-8
Occipital_Sup_R	153	5.56	0.00001	22	-98	10
Cingulum_Mid_R	194	5.31	0.00001	12	-8	28
Lingual_R	43	4.87	0.00003	8	-30	-12
Lingual_R	205	4.76	0.00004	18	-92	-6
Frontal_Inf_Oper_R	49	4.75	0.00004	40	14	18
Cerebelum_Crus2_L	262	4.57	0.00007	-28	-82	-34
Cerebelum_9_R	81	4.56	0.00007	6	-48	-46
Postcentral_L	21	4.26	0.00015	-62	-4	26
Frontal_Inf_Orb_R	60	4.17	0.00019	48	28	-12
Supp_Motor_Area_L	11	4.14	0.00020	0	20	62
Postcentral_L	44	4.08	0.00023	-46	-10	36
Cerebelum_10_L	15	3.67	0.00025	-28	-24	36
Postcentral_L	12	3.55	0.00064	-20	0	36
Cingulum_Mid_L	37	3.48	0.00086	-8	-46	-44
Cerebelum_9_L	65	3.48	0.00101	22	-84	-30
Cerebelum_Crus1_R	24	3.37	0.00101	52	40	-2
Frontal_Inf_Tri_R	10	3.30	0.00132	-4	-36	-12
Cerebelum_3_L	10	3.24	0.00156	44	4	26

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c) *Number* Condition

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**Number Activation: positive**

Parietal_Inf_L	19177	12	0.00000	-50	-26	50
Cerebelum_6_R	3014	10.19	0.00000	26	-62	-26

Frontal_Mid_R	323	8.16	0.00000	42	36	20
Cerebelum_6_L	771	7.18	0.00000	-28	-68	-26
Occipital_Inf_R	582	6.58	0.00000	44	-78	-2
Frontal_Inf_Tri_L	301	6.24	0.00000	-40	30	20
Caudate_R	834	5.77	0.00000	18	2	12
Calcarine_R	654	5.32	0.00001	14	-70	12
Occipital_Inf_L	348	5.19	0.00001	-38	-78	-4
Frontal_Mid_L	15	3.36	0.00135	-34	50	8

**Number Activation: negative**

Postcentral_R	47319	13.93	0.00000	24	-40	66
Cerebelum_Crus2_R	1050	9.26	0.00000	24	-86	-38
Cerebelum_Crus2_L	390	8.12	0.00000	-26	-84	-36
Frontal_Inf_Tri_R	345	5.73	0.00000	52	36	-2
Thalamus_L	77	5.32	0.00001	0	-6	-6
Insula_R	78	5.22	0.00001	38	8	8
Thalamus_L	15	4.49	0.00008	-10	-30	2
Cerebelum_10_L	27	4.15	0.00019	-12	-32	-48
Vermis_1_2	58	4.00	0.00028	4	-40	-26
Cerebelum_9_R	37	3.78	0.00048	4	-48	-46
Parietal_Inf_L	35	3.78	0.00049	-26	-26	34
Cerebelum_10_R	13	3.70	0.00059	14	-32	-46
Insula_L	27	3.69	0.00060	-32	-14	16
Postcentral_R	16	3.57	0.00080	66	-8	20
Cerebelum_8_L	32	3.51	0.00093	-6	-64	-44

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All clusters survived the threshold of  $p < .005$  with 10 voxel extension and no corrections, to facilitate future meta-analysis (Lieberman and Cunningham, 2009). Anatomical labeling follows AAL (automatic anatomical labeling; Tzourio-Mazoyer et al., 2002). A graphical illustration of these regions is presented in Figure 2C.

**Supplementary Table 2.** Brain regions that show trial-wise modulation effects of differential values in the *landmark*, *animal*, and *number* conditions.

Anatomical areas	Cluster size	<i>t</i>	<i>p</i>	MNI coordinates		
				x	y	z
a) <i>Landmark</i> Condition						
<b>Landmark Parametric Modulation: positive</b>						
Temporal_Mid_R	132	6.04	0.00000	36	-62	4
Cingulum_Ant_L	145	4.76	0.00004	-16	44	-6
SupraMarginal_L	31	4.26	0.00015	-40	-44	24
Postcentral_L	70	3.99	0.00028	-18	-42	68
Temporal_Sup_R	27	3.72	0.00056	56	-22	-2
Cingulum_Ant_R	29	3.68	0.00062	12	34	-2
Postcentral_L	20	3.54	0.00088	-28	-36	56
Cerebelum_8_L	15	3.45	0.00108	-24	-64	-48
Cuneus_R	59	3.43	0.00115	12	-86	24
Frontal_Sup_Medial_L	11	3.30	0.00155	-10	58	16
Temporal_Sup_L	11	3.29	0.00159	-62	-24	8
Postcentral_R	11	3.22	0.00188	22	-48	62
Temporal_Sup_R	11	3.22	0.00189	58	-2	-8
Cuneus_R	12	3.15	0.00224	4	-80	36
Temporal_Mid_L	12	3.11	0.00248	-36	-46	12
<b>Landmark Parametric Modulation: negative</b>						
Angular_R	434	7.26	0.00000	42	-66	34
Thalamus_L	159	6.28	0.00000	-6	-20	16
Cerebelum_9_L	122	5.97	0.00000	-14	-52	-48
Precuneus_R	993	5.75	0.00000	14	-56	20
Frontal_Mid_L	378	5.35	0.00001	-28	14	52
Fusiform_R	109	5.10	0.00002	24	-38	-16
Thalamus_L	89	4.99	0.00002	-6	-26	-8
Supp_Motor_Area_L	296	4.90	0.00003	-4	14	56
ParaHippocampal_L	373	4.90	0.00003	-30	-42	-8
Occipital_Mid_L	107	4.82	0.00004	-40	-78	32
Cingulum_Mid_R	97	4.75	0.00004	6	-40	46
Frontal_Mid_R	270	4.68	0.00005	26	16	48
Cerebelum_3_R	81	4.52	0.00008	4	-24	-16
Precuneus_R	257	4.26	0.00015	10	-66	52
Cerebelum_9_R	58	4.22	0.00016	10	-50	-34
Frontal_Mid_L	75	4.11	0.00022	-26	28	40
Frontal_Sup_R	27	4.07	0.00023	22	8	66
Cerebelum_9_R	56	4.03	0.00026	8	-58	-48
Pallidum_R	196	3.95	0.00032	14	6	2
Insula_L	53	3.91	0.00035	-30	22	-10

Cingulum_Mid_R	40	3.89	0.00037	8	-26	24
Cerebellum_Crus1_R	29	3.85	0.00041	10	-72	-28
Hippocampus_L	50	3.79	0.00048	-8	-10	-10
Frontal_Inf_Orb_L	17	3.78	0.00048	-40	36	-16
Frontal_Inf_Oper_R	41	3.70	0.00059	34	8	34
Cerebellum_10_L	15	3.70	0.00059	-2	-30	-46
Cerebellum_3_R	24	3.58	0.00080	16	-26	-20
Precentral_L	24	3.48	0.00102	-36	2	32
Cerebellum_6_L	17	3.37	0.00131	-32	-52	-36
Precuneus_R	10	3.37	0.00132	14	-52	52
Frontal_Inf_Tri_L	90	3.35	0.00138	-36	26	30
Insula_R	34	3.34	0.00143	32	26	0
Parietal_Inf_L	19	3.33	0.00147	-34	-46	46
Pallidum_L	22	3.32	0.00150	-10	8	0
ParaHippocampal_L	16	3.20	0.00197	-16	-16	-22

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b) Animal Condition

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**Animal Parametric modulation: positive**

Occipital_Sup_R	1231	5.72	0.00000	22	-90	24
Rolandic_Oper_L	97	4.75	0.00004	-34	-40	22
Temporal_Sup_L	217	4.62	0.00006	-56	-32	22
Lingual_L	71	4.54	0.00007	-36	-52	2
Cingulum_Mid_R	299	4.53	0.00008	10	-22	36
Frontal_Mid_L	141	4.48	0.00009	-36	40	22
Fusiform_R	16	4.26	0.00015	42	-34	-16
Lingual_R	64	4.20	0.00017	16	-82	-8
Temporal_Mid_R	112	4.18	0.00018	54	-58	2
Fusiform_L	62	4.16	0.00019	-28	-44	-10
Caudate_L	34	4.12	0.00021	-14	22	10
Fusiform_R	112	4.10	0.00022	28	-62	-16
Precuneus_L	97	4.10	0.00022	-8	-70	34
Cingulum_Mid_L	39	3.96	0.00031	-14	-32	50
Fusiform_R	39	3.94	0.00033	30	-42	-10
SupraMarginal_R	93	3.93	0.00033	62	-22	24
Frontal_Med_Orb_R	50	3.91	0.00035	8	52	-8
Cingulum_Ant_L	415	3.82	0.00044	-14	48	-8
Insula_L	49	3.79	0.00047	-38	4	10
Fusiform_L	194	3.78	0.00048	-28	-68	-10
Precuneus_L	29	3.69	0.00061	-12	-50	56
Frontal_Inf_Orb_L	25	3.65	0.00067	-24	36	-10
Caudate_R	16	3.54	0.00088	18	24	10
Insula_R	16	3.42	0.00116	42	2	10
Occipital_Mid_L	30	3.39	0.00125	-42	-82	10
Precentral_R	10	3.24	0.00182	38	-26	64

**Animal Parametric modulation: negative**

Frontal_Inf_Orb_L	2673	7.10	0.00000	-44	40	-18
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Frontal_Sup_Medial_L	1503	6.38	0.00000	-6	38	40
Occipital_Sup_R	511	6.03	0.00000	30	-76	46
Frontal_Inf_Oper_R	1092	5.94	0.00000	44	12	26
Temporal_Inf_L	249	5.87	0.00000	-50	-54	-12
Parietal_Inf_R	573	5.85	0.00000	48	-44	48
Parietal_Sup_L	264	5.08	0.00002	-24	-66	40
Cerebelum_Crus1_L	254	4.50	0.00008	-42	-70	-36
Thalamus_R	17	4.45	0.00009	6	-12	4
Thalamus_L	26	4.40	0.00010	-18	-12	14
Cerebelum_Crus1_R	129	4.27	0.00014	32	-60	-38
Frontal_Sup_L	36	4.13	0.00020	-18	16	58
Cerebelum_Crus2_R	374	4.09	0.00023	8	-82	-28
Thalamus_L	74	4.07	0.00024	-4	-26	0
Frontal_Mid_L	58	4.06	0.00024	-32	16	54
Parietal_Inf_L	113	4.06	0.00025	-48	-40	46
Thalamus_R	59	3.91	0.00035	12	-28	-2
Frontal_Mid_L	25	3.81	0.00045	-36	4	60
Frontal_Inf_Orb_R	10	3.78	0.00048	40	38	-18
Precuneus_L	31	3.71	0.00057	-2	-60	42
Thalamus_R	13	3.58	0.00079	6	-16	-10
Frontal_Sup_L	16	3.57	0.00081	-16	46	30
Temporal_Inf_R	20	3.55	0.00085	50	-52	-12
Cerebelum_9_L	35	3.45	0.00109	-2	-52	-44
Fusiform_R	27	3.45	0.00110	42	-50	-20
Temporal_Inf_L	10	3.44	0.00111	-42	-20	-24
Frontal_Mid_L	32	3.42	0.00116	-30	20	44
Cingulum_Ant_L	18	3.33	0.00145	-4	2	28
Parietal_Sup_R	12	3.29	0.00161	34	-54	58

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c) Number condition

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**Number Parametric modulation: positive**

Rolandic_Oper_R	1653	6.69	0.00000	40	-6	16
Rolandic_Oper_L	3645	6.09	0.00000	-44	-30	22
Insula_L	83	5.40	0.00001	-32	2	12
ParaHippocampal_R	44	5.34	0.00001	24	-32	-14
Precuneus_R	197	5.11	0.00002	22	-46	12
Insula_R	42	5.02	0.00002	36	8	12
Hippocampus_R	62	4.78	0.00004	36	-34	-8
Cingulum_Ant_R	305	4.77	0.00004	4	30	-4
Hippocampus_L	46	4.72	0.00005	-22	-10	-22
Frontal_Med_Orb_R	638	4.65	0.00006	4	54	-6
Frontal_Inf_Orb_L	191	4.65	0.00006	-36	32	-16
Temporal_Mid_R	100	4.52	0.00008	60	-6	-20
Temporal_Mid_L	251	4.30	0.00013	-60	-16	-20
Calcarine_R	40	4.22	0.00016	36	-50	4
Temporal_Sup_R	92	4.17	0.00018	52	-54	22

Temporal_Mid_R	69	4.12	0.00021	50	-62	8
Temporal_Mid_L	228	4.10	0.00022	-56	-58	18
Fusiform_R	103	4.07	0.00024	38	-18	-24
Temporal_Mid_L	175	4.02	0.00027	-46	-44	0
Lingual_R	217	3.90	0.00036	18	-80	-4
Paracentral_Lobule_R	145	3.85	0.00041	12	-22	70
Insula_R	32	3.84	0.00042	38	-10	4
Frontal_Inf_Oper_R	43	3.83	0.00043	24	2	30
Cingulum_Mid_L	93	3.57	0.00081	-4	4	38
Cingulum_Mid_R	23	3.51	0.00094	8	-22	32
Frontal_Sup_Medial_L	29	3.41	0.00119	-8	60	24
Cingulum_Mid_R	64	3.35	0.00139	16	-24	48
ParaHippocampal_L	25	3.29	0.00158	-22	-40	-10
Precentral_R	11	3.08	0.00267	38	-10	36
Postcentral_L	12	3.06	0.00274	-22	-40	66
Rolandic_Oper_R	18	3.01	0.00315	58	2	8

**Number Parametric modulation: negative**

Supp_Motor_Area_R	2180	8.13	0.00000	6	20	52
Precentral_L	888	5.19	0.00001	-42	8	30
Vermis_9	157	5.12	0.00002	0	-52	-36
Insula_L	321	5.06	0.00002	-28	22	-6
Parietal_Sup_L	1114	5.02	0.00002	-26	-62	48
Insula_R	404	4.84	0.00004	36	20	-8
Occipital_Mid_R	1089	4.71	0.00005	34	-62	30
Cerebellum_Crus1_L	138	4.67	0.00005	-10	-78	-26
Precentral_R	389	4.60	0.00006	46	8	30
Pallidum_R	390	4.56	0.00007	14	4	-2
Frontal_Inf_Tri_R	242	4.54	0.00007	44	30	18
Pallidum_L	117	4.41	0.00010	-12	4	2
Cerebellum_6_L	138	4.38	0.00011	-30	-62	-30
Cerebellum_8_R	19	4.33	0.00012	30	-72	-50
Frontal_Mid_L	324	4.33	0.00012	-26	10	54
Thalamus_L	103	4.30	0.00013	-8	-10	2
Cerebellum_10_L	30	4.22	0.00016	-18	-36	-42
Cerebellum_6_R	103	4.15	0.00019	8	-76	-20
Vermis_10	46	4.04	0.00025	0	-34	-44
Cerebellum_3_R	96	3.99	0.00029	8	-28	-14
Temporal_Inf_L	86	3.89	0.00037	-44	-66	-10
Occipital_Inf_L	25	3.88	0.00038	-38	-86	-8
Cerebellum_7b_L	15	3.67	0.00063	-28	-70	-48
Vermis_3	11	3.44	0.00112	-2	-32	-6
Cerebellum_6_R	27	3.41	0.00121	34	-70	-26

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Note: All clusters survived the threshold of  $p < .005$  with 10 voxel extension and no corrections, to facilitate future meta-analysis (Lieberman and Cunningham, 2009). Anatomical labeling follows AAL (automatic anatomical labeling; Tzourio-Mazoyer et al., 2002). A graphical illustration of these regions is presented in Figure 3C.